

FORFAI, Sandor

General solution of the minimum of weighted sums in case
of their fixed arrangement. Muszaki kozl MTA 32 no.1/4:
213-220 '63.

1. Nehezipari Muszaki Egyesum Banyamuvelestani Tanszek,
Miskolc.

FORRAI, S.

Simple determination of the direct tangent of the bearing of an
adjusting straight line which satisfies the condition $\sum p e^2 = \text{min}$
Acta techn Hung 47 no. 1/2:97-108 '64.

1. Department of Mine Exploitation, Technical University of
Heavy Industry, Miskolc.

ABRUDAN, V., ing.; CIOBANU, M., ing.; PETRESCU, Gh., ing.; VILVOI, V.; IONESCU, C., ing.; KESTENBAUM, S.; FORRAI, St., ing.; FUClu, Martian; NILA, Vasile, ing.; AROMINESEI, Alexandru; MORARU, Nicolae, ing.; BOGHICI, A.; SIMIONESCU, M.

Reduction of specific consumptions of metal. Probleme econ 17 no.12:137-141 D '64.

1. Technical Director, Arad Plant of Railroad Cars (for Abrudan). 2. Chief Technologist, Arad Plant of Railroad Cars (for Ciobanu). 3. Technical Director, "1 Mai" Plant, Ploiesti (for Petrescu). 4. Chief Planning Engineer, "1 Mai" Plant, Ploiesti (for Vilvoi). 5. Director, "Infratirea" Machine Tool Plant, Oradea (for Ionescu). 6. Assistant Chief Engineer, "Infratirea" Machine Tool Plant, Oradea (for Kestenbaum). 7. Chief Technologist, "Infratirea" Machine Tool Plant, Oradea (for Forrai). 8. Director, Arad Plant of Lathes (for Fuciul). 9. Chief Technologist, Arad Plant of Lathes (for Nila). 10. Chief Engineer, Arad Plant of Lathes (for Arominesei). 11. Technical Director, "Independenta" Plant, Sibiu (for Moraru). 12. Director, Sinaia Mechanical Plant (for Boghici). 13. Chief Engineer, Sinaia Mechanical Plant (for Simionescu).

FORRAINE Banlaki, Erzsebet, dr.

"Studies in experimental psychology", edited by Alexandru Rosca. Reviewed by Mrs. Erzsebet Forrai nee Banlaki. Magy pszichol szemle 20 no.3:478-480 '63.

Forrat E.G.

USSR/Chemical Technology - Chemical Products and Their
Application. Ceramics. Glass. Binders. Concrete.

H-7

Abs Jour : Referat Zhur - Khimiya, No 1, 1958, 2113

Author : Forrat E.G.

Inst : -

Title : Use of Finely Granulated Sand in Building Mortars.

Orig Pub : Str-vo predpriyatiy neft. prom-sti, 1957, No 4, 8-11

Abstract : A study is made of the possibility of a partial replacement of the medium grain-size sand (average particle size 0.28-0.32 mm), which has to be shipped from another place, used in making building mortar, by a local finely granular sand (size modulus 0.01), containing 99.3% of particles of less than 0.15 mm, including 16.5% of clayey and pulverulent particles. It was found that water/cement ratio is increased on increasing the content of finely granulated sand and on decreasing the content of cement per 1 m³ of expenditure and increases on

Card 1/2

USER/Chemical Technology - Chemical Products and Their
Application. Ceramics. Glass. Binders. Concrete.

H-7

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2113

partial replacement of medium size sand by the finely granulated sand, which is due to a decrease of the total amount of void space. In the experiments which were carried out the optimum content of finely granulated sand amounted to 30-35% of the weight of sand mixtures. On mixing medium size and finely granulated sand the volume of the mixture amounts to approximately 94% of the sum of the initial volumes of the two kinds of sand. However, the yield final mix varies but little, which is due to the fact that mixes made with a mixture of sand require more water than mixes made with only medium size sand. When a mixture of the two kinds of sand is used a more prolonged stirring in the mortar mixer is required.

Card 2/2

FORRO, Albert, dr.

An appeal Energia es atom 16 4:158 Ap '63.

1. Energia Vilagkonferencia Maygar Nemzeti Bizottsaga elnöke.

FORRO, Dezsö; GAL, István

Electronic circuits of long-distance dialing. Magy hir techn 12 no.2:
64-69 Ap '61,

1. Belciannisz Hiradastechnikai Gyár.

FORRO, Dezsö

The 400 line crossbar substation manufactured by the Belciannisz
Telecommunication Factory. Hir techn 15 no. 6;179-182 Je '64.

1. Belciannisz Telecommunication Factory, Budapest.

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CIA-RDP86-00513R000413520007-9

FORRO, Henrik (Budapest); BODIS, Andras (Budapest); GERA, Janos (Budapest).

Forum of innovators. Ujtit lap 16 no.13:30 10 J1 '64.

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413520007-9"

TOMPA, Ferenc, dr.; FAJZI, Karoly, dr.; FORRO, Istvan, dr.

On the role of glucocorticoids in decreasing surgical risk. Magy.
sebeszet 14 no.3:153-157 Je '61.

1. Matrahazai Allami Tudobeteggyogyintezet (Igazgatoforvos: Lanyi
Andor dr.) Tudosebeszeti Osztalyanak (Osztalyvezeto: Tompa Ferenc
dr.) kozlemenye.

(SURGERY OPERATIVE compl)
(ADRENAL CORTEX HORMONES ther)

FORRO, Istvan, dr.; TOMPA, Ferenc, dr.; FAJZI, Karoly, dr.

Results of intravenous barbiturate with N_{20} anesthesia. Magy. sebeszet
14 no.6:386-390 D '61.

(BARBITURATES anesth & analg)
(NITROUS OXIDE anesth & analg)
(ANESTHESIA INTRAVENOUS)

TOMPA, Ferenc, dr.; FAJZI, Karoly, dr.; FORRO, Istvan, dr.

Indications and immediate results of open treatment of caverns.
Tuberkulozis 17 no.5:142-145 My '64.

1. Szamuely Tibor TBC Gyogyintezet es a Matrahazai All. TBC Gyogintezet kozlemenye.

FAYZI, Karoly, dr.; TOMPA, Ferenc, dr.; FORRO, Istvan, dr.

Circumscribed pulmonary aspergillosis. Tuberkulosis 17 no.8:
239-244 Ag '64.

1. A Matrahazai All. TBC Gyogyintezet, a Szamuelv Tibor TBC
Gondozas Gyogyintezet kozlemenye.

116

Increase in capillary resistance with high doses of vitamin D₃. László Zsiró and László Székely (Univ., Szeged, Hung.). *Magyar Belgyógy. Arch.* 3, 64-6(1950).—The

capillary resistance dtd. with the Barbuti app. increased by 100-120% upon daily administration of 1.6×10^8 units vitamin D₃ for 3-4 weeks to men and increased by 450% in guinea pigs with 6-12,000 units/day for 15 days. The capillary resistance was independent of the Ca level of the blood. No toxic effects from the vitamin doses were observed on guinea pigs.

István Findly

FOERO, L.;SZEGO, L.

Studies on the antihistaminic properties of PAS. Acta physiol. hung.
2 no.3-4:415-421 1951. (GLML 22:1)

1. Of the Dermatological and Venereological Clinic of Szeged University.

FORRO

KOCSIS, A.; NANASI, P.; FORRO, L.; PEKETE, Z.

**Laboratory data on the prevention of bismuthia. Orv. hetil.,
Budap. 92 no.28:909-912 15 July 1951. (CLML 20:11)**

1. Doctors. 2. Skin and Venereal Diseases Clinic (Director -- Prof. Dr. Lajos Szodoray), Debrecen Medical University; Skin and Venereal Clinic (Director -- Prof. Dr. Tamas Ravnay), Szeged Medical University.

RAVNAY, T.;FORRO, L.;SZEGO, L.

Studies relative to the mode of action of the thiosemicarbazones.
Borgyogy. vener. szemle 7 no.3:65-71 May 1953. (CLML 25:1)

1. Doctors. 2. Skin and Venereal Diseases Clinic (Director -- Prof.
Dr. Tamas Ravnay), Szeged Medical University.

2424

FORRO, L.; ABRANDI, E.

A new simple method of injection into lymphatic vessels of laboratory animals. Acta physiol. hung. 6 no.2-3:347-350 1954.

1. Klinik fur Haut-und Geschlechtskrankheiten und Institut fur Chirurgie, Anatomic und Operationslehre der Medizinischen Universitat, Szeged.

(INJECTION

in lymphatic vessels, appar. for laboratory animals)

(LYMPHATIC VESSELS

inject. into, appar. for laboratory animals)

(LABORATORY ANIMALS

inject. method in lymphatic vessels, appar.)

FORRO, Lasslo; ABRANDI, Endre

A new simple method of injection into lymphatic vessels of experimental animals. Kiserletes orvostud. 6 no.6:538-540 Nov 54.

1. Szegedi Orvostudomanyi Egyetem Bor-, es Hemibeteg Klinika ja es Sebeszeti-Anatomiai es Nutettani Intezete.

(INJECTIONS

into lymphatic vessels, appar. for small laboratory animals)

(LYMPHATIC VESSELS

inject. appar. for small laboratory animals)

1801. Prevention by penicillin in animals of bismuth dark border
line and stomatitis. L. Forró, A. Traub, and L. Szádeczky *Dermatolo-*
gica, Basel, 1955, III, 150-156 (Skin Clinic, Univ. of Szeged,
Hungary).—In cats with a silk thread passed through the gingiva,
Bi injections produced a Bi gingival border and stomatitis after
5-6 days. When penicillin was given at the same time, the Bi
border appeared much later, and the stomatitis not at all. (German)
W. R. Berr. *Med* *3*

KOVATS, Tibor, Gyorgy.; MAGOS, Laszlo.; FORRO, Laszlo.; FISCHER,
Gyorgy, LUKACS, Ida.

Schwartzmann phenomenon induced by azoprotein from homologous
and heterologous serums. Kiserletes orvostud. 7 no.1:92-95 Jan 55.

1. Szegedi Orvostudomanyegyetem Kozegeszsegtani Intezete es Bor- es
Nemibeteg Klinikaja.

(ALLERGY, experimental,

Schwartzmann phenomenon induced by azoprotein from
homologous & heterologous serums)

2854. Shwartzman phenomenon elicited by azoproteins prepared from homologous or heterologous serum. T. G. Kováts, L. Magos, L. Forró, G. Fischer, and I. Lukács *Acta physiol. Acad. Sci. hung.* 1955, V. 113-118.—Rabbits given an intradermal injection of a filtrate of *E. coli* are sensitised with *p*-aminobenzoic acid serum azoproteins of heterologous and homologous sera. An i.v. injection of either of the two serum azoproteins elicits the Shwartzman haemorrhagic, necrotic dermal inflammation at the site of the intradermal injection. No correlation was found between the intensity of Shwartzman reaction and the amount of circulating antibodies or the homologous or heterologous nature of the protein component. It is assumed that in certain necrotic-haemorrhagic inflammations the proteins of the organism become modified into antibodies which, in turn result in an antigen-antibody reaction, giving rise to inflammation. (Hungarian) A. B. L. Buzsák.

5

Met

GYULA, Ivady, dr.,; FORRO, Laszo, dr.

Treatment of acne vulgaris and dermatitis seborrheides with
cholesterin. Borgyogy. vener. szemle 9 no.3:80-83 May 55

1. A Szegedi Orvostudomanyi Egyetemi Gyermekklinika (igazgato:
Waltner Karoly dr. egyetemi tanar) es Bor- es Nemibeteg Klinika
(igazgato: Ravnay Tamas dr. egyetemi tanar) kozlemenye.

(ACNE, therapy

cholesterol)

(DERMATITIS SEBORRHEICA, therapy

cholesterol)

(CHOLESTEROL, ther. use

acne & dermatitis seborrheica)

FORRO, Laszlo, dr.; TRAUB, Alfred, dr.; SZADECZKY, Laszlo, dr.

Prevention of the formation of a bismuth film, and of subsequent stomatitis, by means of penicillin in animal experiments. *Borgyogy. vener. szemle* 9 no.6:221-224 Nov 55.

1. A Szegedi Orvostudomanyi Egyetemi Bor- es Nemibeteg Klinika (Igazgato: Ravnay, Tamas, dr. egyetemi tanar) es Korbonctani es Korszovettani Intezet. (igazgato: Korpassy, Bela, dr. egyetemi tanar) kozlemenye.

(STOMATITIS, experimental

, caused by bismuth film in cats, prev. eff. of penicillin)
(BISMUTH, toxicity

stomatitis, in cats, prev. eff. of penicillin)

(PENICILLIN, effects

on exper. bismuth stomatitis in cats, prev. eff.)

EXCERPTA MEDICA Sec.13 Vol.11/1 Dermatology, etc. Jan 57

220. FORRÓ L., TRAUB A. and SZÁDECZKY L. Szegedi Orvostud. Egyet. Bör-
es Nemibeteg Klin., Kórbonctani és Kórszövettani Int. Közl. *A bismuth-
szegély és stomatitis kivédése penicillinnel állatkísérletekben. Preven-
tion of the bismuth line and stomatitis from penicillin
in animal experiments BÖRGYÓGY. VENER. SZLE 1955, 31/6 (221-
224) Tables 1 Illus. 2

GDR / Human and Animal Physiology (Normal and Pathological). Skin. T

Abs Jour: Ref Zhur-Biologiya, No 21, 1958, 98009

Author : Ivady, Gy.; Forro, L.; Nagy. I.

Inst : Not given

Title : The Study of Cholesterin Influence on the Function of Sebaceous Glands

Orig Pub: Dermatol. Wochenschr., 1957, 136, No 30, 801-804

Abstract: To rats at the age of about one year, a 0.5-3 percent solution of pure cholesterin (C) in sunflower oil (every other day, 25 injections altogether; total dose of the injected C varied from 1.5 to 5.5 mg/kg) was injected intramuscularly. Control animals received only oil injections. Before and

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GDR / Human and Animal Physiology (Normal and Pathological). Skin. T

Abs Jour: Ref Zhur-Biologiya, No 21, 1958, 98009

after the experiment, a biopsy of skin fragment from the back was performed and histochemical investigations of sebaceous gland ester activity was conducted. After injection of C, the activity decreased, corresponding to the introduced dose. The data may be utilized in the practice of treatment of C of acne, particularly of adolescent blackheads. --A. S. Raben

Card 2/2

IVADY, Gyula, dr.; FORRO, Laszlo, dr.; NAGY, Istvan, dr.

Experiments on the influence of cholesterol on the function of the sebaceous glands. Borgyogy. vener. szemle 11 no.2-3:76-78 Apr-June 57.

1. A Szegedi Orvostudomanyegyetemi Gyermekklinika (igazgato: Waltner Karoly dr. egyetemi tanar), Bor- es Nemibeteg Klinika (igazgato: Ravnay Tamas dr. egyetemi tanar), Bonctani es Szovet-Fejlodestani Intezet (igazgato: Gellert Albert dr. egyetemi tanar) kozlemenye.
(CHOLESTEROL, eff.

on non-specific esterase activity in rat sebaceous glands (Hun))

(ESTERASES

in sebaceous glands, eff. of cholesterol on non-specific activity in rats (Hun))

(SERACEOUS GLANDS, eff. of drugs on cholesterol, on non-specific esterase activity in rats (Hun))

EXCERPTA MEDICA Sec 13 Vol 13/5 Dermatology May 59

1231. REMOVAL OF FRECKLES WITH CARBOLIC ACID - A karbolsavas ephell-seltároltással szerzett tapasztalataink - Forró L. - BÖRGÖÖY VENER. SZLE 1958, 24/1-2 (67-70) Illus. 2

Winter's method of removal of freckles with liquid carbolic acid and sulphuric acid (1:3; Brit. J. Dermat., 1950, 62, 83 and Exc. Med. S. XIII, Vol. 5, abstr. no. 155) was retested. The recurrence rate is 10-50%. Under the conditions described, treatment can be carried out without risk in outpatients. Pigmented spots after healing of the skin inflammation can be removed by peeling and destaining methods.

Bielicky - Prague

FORRO, Laszlo, dr.; BOGDAN, Erno, dr.

Experiments in the treatment of psoriasis with Antaethyl-shock.
Borgyogy vener. szemle. 40 no.4:164-167 Ag '64.

1. A Szegedi Orvostudomanyi Egyetem Bor- es Nemibeteg Klinika
(Igazgato: dr. Ravnay Tamas egyetemi tanar) es Ideg- es
Elmekortai Klinika (Igazgato: dr. Huszak Istvan egyetemi
tanar) kozlemenye.

4

CA

The voltage balance of an electrolyzer. V. P. Mashovets
and G. V. Fershtman. Zhar. Fizika. Khim. (J. Applied
Chem.) 22, 1031 (1948). — The conventional procedure of
averaging the potential of an electrode and assuming an av-
erage field across the electrolyte can be meaningless if the
field between the electrodes is nonhomogeneous. Theore-
tically and experimentally it is possible to have a field dis-
tribution in which certain points of layers of the electrolyte
lying at the anode are at a lower potential than some points
close to the cathode.
N. Tboon

CONFIDENTIAL, G.W.

✓ "Influence of the Geometric Parameters of the Electrolytic Cell on the Distribution of Potential and Current on the Electrode Surface. G. V. Forsslom and V. P. Mashovets (Trudy Sosredchaniya po Elektrokhimii 1950, 1953, 431-441).
[In Russian]. Various experiments were made, using acid CuSO₄ baths. The effective electrode potential, calculated for the mean c.d., depends on the geometry of the cell. The ohmic resistance of the electrolyte depends not only on the geometry and the resistivity of the electrolyte, but also on the polarizability of the electrode and the current strength, so that the conception of a "cell const." is meaningless. The same is true of the idea of "throwing power". — G. V. E. T.

①

FORSLGM, G

V

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Elektroloticheskoye Proizvodstvo Alyuminiya (Electrolytic Production of
Aluminum, by) V. P. Mashovets i G. V. Forsblom. Moskva, Metallurgizdat, 1951.
220 p. Illus., Diagrs., Tables.

AB-520529

3
②

Role of geometric factors in the so-called "throwing power" of electroplating baths. V. P. Mashovets and F. V. Forsblom (*J. appl. Chem. USSR*, 1952, 25, 532-542).—It is maintained that the throwing power, as determined in Haring and Blinem's cell, is not independent of the dimensions of the electroplating bath. By a mathematical analysis, which considers electrode polarisabilities, inter-electrode spacing, mutual disposition of anode and cathode, electrolyte conductance, and current strength and c.d., it is demonstrated that predictions of throwing power may be very wrong.
R. C. MURRAY

Metallurgical Abst.
June 1954
Electrodeposition

3 (4)
✓ "The Role of Geometrical Factors in the So-Called "Dispersibility" of Galvanic Baths." V. P. Mashovets and G. V. Koroblov (Zhur. Fizikal. Khim., 1952, 26, (10), 632-649 (in Russian); J. Appl. Chem. U.S.S.R., 1952, 25, (5), 697-609 (in English).—According to Lainer and Kudryavtsev ("Fundamentals of Electroplating", Moscow: 1949), the dispersibility of the bath is the divergence of the distribution of the metal from the fundamental distribution of current, thus indicating the possibility of obtaining a uniform deposit on a profiled cathode without the use of contoured anodes, screens, &c. M. and F. propose analytical expressions enabling the effect on the dispersibility of variations in the polarizing powers of the electrodes, the sp. elect. conductivity of the electrolyte, the current strength, and the distance between the electrodes to be determined. By graphical construction of the elect. fields in various baths, it has been shown that a given variation in any one factor may lead to either more or less uniform distribution of the current on the cathode, depending on the geometrical parameters of the bath.—G. V. E. T.

FORSBLOM, G.V.

Evaluation of voltage drop in aluminum cells. G. V. Forsblom and V. P. Mashovets [All-Union Aluminum-Magnesium Inst., Leningrad]. Zhur. Prilad. Khim. 25, 1165-76 (1952); cf. C.A. 44, 4802z.—The ohmic voltage drop ΔV in a cryolite- Al_2O_3 bath with Al and graphite electrodes was detd. analytically as a function of parameters obtained either from a plot of the elec. field or from the dimensions of the electrodes, length A and width B ($P = 2(A + B)$) and the interelectrode distance L . At first it was assumed that the entire polarization effect was due to that of the graphite electrode. Then 3 fields of this electrode were plotted: no assumed polarization; polarization assumed according to the e.d. vs. γ data of Karpacheva, et al. (C.A. 43, 6510e) and according to similar data of dr. Kay Thompson, et al. (C.A. 27, 4483). The analysis of these fields led to the conclusion that the effect of polarization on ΔV was negligible and the equation was reduced to

$$\Delta V = (I\rho/N) \sum_{i=1}^N m_i = 1.56$$
 which was considered in satisfactory agreement with exptl. data ($I = iN$, i the elec. power of each "tube" of force, N the no. of tubes in the entire vol., m the no. of elements of vol. in each tube, and ρ the specific resistance of the electrolyte). A simpler equation which could be solved without plotting the electrode field was obtained: From previously published data (C.A. 46, 10902g) it was shown that the effect of the distance C between the walls and the edges of the electrodes was negligible for $C \geq 5L$. It was also shown that for L between 3 and 10 cm, the no. of tubes as a function of L was practically linear. Within these limits of C and L the equation was $\Delta V = I\rho L/(AB + P(L + 2.5))$. Over a wide range of the parameters the calcd. values agreed satisfactorily with exptl. data. I. Bencowitz

1. MASHOVETC, V. P.: FORSBLOM, G. V.
2. USSR (600)
4. Electric Currents
7. Distribution of a direct current electric field in electrolyzers. *Zhur. fiz. khim.* 26 no. 10, 1952.

9.8 Monthly List of Russian Accessions, Library of Congress, March 1953. Unclassified!

U S S R .

.. The dependence of the electrochemical and ohmic fall of potential upon the geometry in an electrolytic cell. G. V. Forstblom and V. P. Mashovets. *J. Appl. Chem. U.S.S.R.* 20, 367-370 (1953) (Engl. translation).—See *C.A.* 48, 5658c.
H. L. H.

U.S. EASY LEAD

The dependence of the electrochemical and ohmic fall of potential upon the geometry in an electrolytic cell. G. V. Poroblik and V. P. Mulyukov. *Zhur. Priklad. Khim.* 26, 1020-1 (1953).—The effective potential of an electrode was dependent upon local c. ds, which were detd. by cell geometry. In regions of low c.d., the electrode potential usually diminished faster than linearly with a decrease of c.d. Therefore the effective potential was lowered as current distribution became nonhomogeneous. The change in potential was illustrated for 2 electrolytic cells differing only in the shape of the anode. A graphical method of field construction was used (C.A. 47, 9245c). Potential and current distribution patterns were shown for a cell with two parallel plate electrodes (presumably Cu) 300 mm. long, sep'd. by a distance, l , where $l = 50$ or 100 mm. One electrode was displaced 100 mm. relative to the other. The technique permitted calcn. of cell consts. as used in cond. measurements (C.A. 44, 4822e). Cell consts., C , were measured for a soln. contg. 50 g./l. of $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ and 3 solns. of the same concn. of CuSO_4 contg. H_2SO_4 . At $l = C = 2.05$ for the CuSO_4 soln.; 2.32 for a soln. contg. 20 g./l.; 2.33 for a soln. contg. 50 g./l.; and 2.09 for a soln. contg. 350 g./l. At $l = 50$ mm., with a.c., $C = 1.33$ for all 4 solns.; with d.c. (45 ma.), $C = 1.33$ for the CuSO_4 soln.; 1.40 for the soln. contg. 20 g./l.; 1.60 for the soln. contg. 50 g./l.; and 1.86 for a soln. contg. 350 g./l. With the soln. contg. 50 g./l. and $l = 50$ m.m. the values of C at 15 and 90 ma. d.c. were 1.08 and 1.40, resp. The increase of C in the d.c. measurements with higher H_2SO_4 concns. resulted from longer current lines and must be ascribed to greater polarization since the cond. increased. Current distribution must be uniform to obtain reproducible electrolytic cell data, especially in good conductors such as fused salts. For this reason, "a.c. consts." derived from a.c. data were inadmissible for use in d.c. electrolysis. R. D. Mi

All-Union Aluminum-Magnesium Inst.

FORSBLOM, G.V.

Distribution of the electric field of direct current in electrolyzers.
A graphical method of field construction. Zhur. Fiz. Khim. 27, 321-9 '53.
(CA 47 no.19:9825 '53) (MLRA 6:5)

1. All-Union Inst. Aluminum and Magnesium, Leningrad.

USSR.

The conditions of modeling the electrical field of electrolyzers. G. V. Forsblom and V. P. Mashovets. *Bekhody Akad. Nauk SSSR* 91, 593-5 (1933).—For the feasibility of modeling, the varying parts of the polarization equation, i.e., the dependence of the electrode potentials on e.d. of the corresponding anodes and cathodes of the model and of the real field, must be expressed as curves of the same family. In many cases the desire for an accurate quant. soln. must be compromised with semiquant. or even qual. results. In some practical problems, a model may be built to reproduce sufficiently accurately the real field. Such cases include those in which one electrode, polarized more weakly than the other, may be considered unpolarizable, and also those cases in which the electrode potentials depend linearly on the e.d. The former cases are very commonly observed on electrolysis of fused salts. The latter are often observed with intermediate and high e.d.'s in diverse electrode-electrolyte combinations. B. M. Elkin

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6. V. V. RAS DLO 87

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f

Distribution of the electric field of direct-current cells.
V. P. Meshovets and G. V. Forsblom. Zhur. Priklad. Khim. 27, 280-97 (1954); C. A. 47, 7018a.—To confirm experimentally the differential equations and conclusions derived analytically and previously reported, the equipotential lines of a rectangular electrolyzer were detd. over a wide range of c.d., polarizing power of the electrodes (Cu, Pb), and the sp. cond. χ of the electrolyte. Electrodes of identical dimensions and parallel to each other were offset so that only a part of each was opposite the other, thus distorting the field. The electrolytic contact was so mounted that it could be moved normal and parallel to the electrodes. The potentiometer was set at prestd. p. ds. ΔU and the contact moved over the cell until the zero point was reached and recorded. At the end of the expt. the entire cell was plotted with equipotential lines. The current lines, normal to the equipotential lines and forming angle θ with the electrode, were drawn with a divider so that the distance between them was equal to that between the equipotential lines. The no. of spaces, "tubes of force," between the current lines, n , in the field and their current force, j , entered in all subsequent calcs.: $x = I/1.5n\Delta U$, where I = in, (1.5 cm. = the electrolytic depth in the cell). The calcd. and exptl. values of x agreed within $\pm 5\%$. Curves of c.d. vs. χ yielded the values of $d\chi/dj$, the polarizing power of the electrodes, and those of c.d. vs. λ gave $dj/d\lambda$; j = the c.d. over the electrode and λ the distance in cm. of a given point from the edge (left) of the electrode. The calcd. value of $\tan \theta = -j/x(d\chi/dj)(dj/d\lambda)$ agreed satisfactorily with the exptl. values, considering the difficulties of obtaining the several values from plots. Addnl. conclusions made previously (loc. cit. and C.A. 48, 6885) were corroborated.

I. Benowitz

BB/j
12/13/87

FORSBLOM, G.V.

Effect of electromagnetic fields on the performance of aluminum
electrolyzers. Tsvet.met.29 no.3:63-72 Nr '56. (MIRA 9:7)

1. Vsesoyuznyy aluminiiyevo-magniyevyy institut.
(Aluminum--Electrometallurgy)

✓ Control of the process of electrolysis of cryolite-alumina
15
minerals in the production of aluminum
in the U.S.S.R.
1960
1960
1960

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AUTHOR: Niderkorn, I.

136-2-17/22

TITLE: Notes on the Article of G.V. Forsblom and R.A. Sandler
"CO₂ Content of Anodic Gases as a Method for Controlling
the Process of the Electrolysis of Cryolite-Alumina Melts."
(Zamechaniya k stat'ye G.V. Forsbloma i R.A. Sandlera "Soder-
zhaniye CO₂ v anodnykh gazakh kak metod kontrolya protsessa
elektroliza kriolit-glinozemnykh rasplavov)

PERIODICAL: Tsvetnye Metally, 1957, No.2, pp. 83 - 84 (USSR)

ABSTRACT: In Tsvetnye Metally 1956, No.6, Forsblom and Sandler
suggested that electrolysis in aluminium-producing electro-
lysers could be controlled from CO₂ - determinations in the
anode gases. The present author rejects their views on the
mechanism of CO - formation from CO₂ and on the effects of
current density, alumina concentration and other factors on
1/1 anode-gas analysis.
There are 5 Slavic references.

ASSOCIATION: Mintsvetmetzoloto.

AVAILABLE: Library of Congress

SOV/137-58-9-18798

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 92 (USSR)

AUTHORS: Strelets, Kh.L., Voynitskiy, A.I., Ivanov, A.I., Petrov, V.I.,
Sergeyev, V.V., Forsblom, G.V.

TITLE: Studies in the Metallurgy of Titanium (Raboty v oblasti metal-
lurgii titana)

PERIODICAL: V sb.: Legkiye metally. Nr 4. Leningrad, 1957, pp 114-120

ABSTRACT: A review of studies of titanium metallurgy in the USSR comprising the production of anhydrous $TiCl_4$, the development of processes and equipment for reduction of $TiCl_4$ by Mg and Na, the purification of Ti sponge, the electrolysis of Ti and TiO_2 chlorides, the electrolytic refining of Ti, etc. The studies and investigations performed have made it possible to organize large-scale industrial extraction of Ti in the USSR.

Yc.Z.

1. Metallurgy--USSR 2. Titanium--Study and teaching

Card 1/1

SOV/136-58-9-9/21

AUTHORS: Forsblom, G.V. and Goldeilenok, Ye. G.

TITLE: Study of the Wetting Effects in the Magnesium-Thermic Reduction of Titanium (Izucheniiye yavlenii smachivaniya v protsesse magniyetermicheskogo vosstanovleniya titana)

PERIODICAL: Tsvetnyye Metally, 1958, Nr 9, pp 43-47 (USSR)

ABSTRACT: The authors give the results of their work, which they claim is the first attempt in this field, on the wetting of various materials by liquid magnesium chloride. The work was confined to the more qualitative aspects and employed a modification of the 'sitting drop' method (Refs. 1,2,3) in which the measurements could be carried out in a vacuum or a controlled atmosphere (figs 1 and 2). The image of the drop was projected onto a screen, traced and examined, the drop temperature being measured into a chromel-alumel couple and recorded on a type EPD-12 electronic potentiometer. The argon used was purified by passing over hot copper and titanium and over anhydrous calcium chloride. It was found that at 650-900°C in argon type St.3 steel is not wetted by magnesium, nor is titanium (0.5% C, 0.13% Fe, 0.06% Si, 0.03% N) at

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Study of the Wetting Effects in the Magnesium-Thermic Reduction of
Titanium

SOV/136-58-9-9/21

650-850°C. Both materials were wetted by magnesium if they were covered by a layer of magnesium chloride. The spreading of magnesium over a titanium surface was prevented by adding titanium tetrachloride to the argon even in very small concentrations; with a steel plate this effect was obtained with concentrations of 0.0065-0.0108 but not of 0.001-0.0032 g/cm³. Liquid magnesium chloride was found to wet titanium more than steel. A special container was used to study the wetting of liquid magnesium by magnesium chloride in argon and argon with 0.01-0.015 g/cm³ of titanium tetrachloride; with the latter reaction took place between the magnesium and tetrachloride forming an appreciable quantity of sponge, with the former wetting began as soon as the chloride had melted.

There are 4 figures and 3 references (Soviet)

ASSOCIATION: VAMI 1. Titanium--Reduction 2. Wetting agents--Test results
Card 2/2 3. Magnesium alloys--Performance 4. Argon--Applications

SOV/136-59-1-13/24

AUTHORS: Arkad'yev, A.G., P'yankov, V.A., Strelets, Kh.L. and
Forsblom, G.V.

TITLE: Development of a System for Automatic Control of the
Magnesium-Thermic Titanium Reduction Process (Razrabotka
skhemy avtomaticheskogo regulirovaniya protsessa
magniytermicheskogo vosstanovleniya titana)

PERIODICAL: Tsvetnyye Metally, 1959, Nr 1, pp 53-62 (USSR)

ABSTRACT: The authors describe the titanium production process in
which the tetrachloride reacts exothermically with
magnesium at a temperature of 850-900°C and over. They
suggest that control of this process requires control of
tetrachloride feed and reaction-vessel cooling, of
charging of magnesium and discharging of magnesium
chloride and of non-reactive zone heating. They describe
work on the possible automation of the process;
Engineers L.B. Kurslyuk, N.A. Plakhotnikova, I.B. L'vin
and R.A. Sandler participated. Studies of temperature
distribution in reaction vessels showed that temperatures
at a given level were uniform within 15-20°C (except at
Card 1/4 the start), but the level of maximal temperature shifts
during the process (Fig 2 shows temperature vs time

SOV/136-59-1-13/24
Development of a System for Automatic Control of the Magnesium-Thermic Titanium Reduction Process

Card 2/4

curves for levels 1-5 (in ascending order of height) against time (hours)). From an examination of the requirements for automation they conclude that the system should be based mainly on keeping the process at the maximal temperature and mention that a suitable device has been described (Ref 2). The authors outline the system they have developed. In this (Fig 3), PSR1 potentiometers, connected to the appropriate junctions of multiple-junction thermocouples, control the heating of the upper and lower parts of the reaction vessel; the middle-zone temperature is measured by an EPP-120-2S potentiometer to which the maximal-temperature finder automatically connects the highest-temperature junction of those in that zone; during the heating the zone-temperature is controlled by a contact on the potentiometer, operating, through a type IR-130 controller and a type IM-2/120 actuating mechanism, the regulating valve for the tetrachloride flow; this flow is also controlled by the pressure in the vessel (the manometer being

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Development of a System for Automatic Control of the Magnesium-Thermic Titanium Reduction Process

provided with a DSR 1 secondary instrument with contacts), manually, or remotely by a transducer PDI and a secondary device EPID-05 with an integrator; a computer provides, depending on signals from the integrator for the appropriate influxes of tetrachloride, the tapping of magnesium chloride and magnesium addition and the ending of the process. The authors give descriptions of the circuits (Fig 4), the ITM-205 maximal-temperature finder (made by the KB TsMA) and the multiple-junction couples it requires, the control valve and the flow transducer I type PDI (Fig. 5). They outline tests on a pilot-plant scale installation which showed that the temperature control (Fig 6) was better than with manual regulation (Fig 7) and that better-quality processes with higher

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Development of a System for Automatic Control of the Magnesium-Thermic Titanium Reduction Process

productivities were obtained with automation (Table).
They state that the automatic system has functioned well
in full-scale tests.

There are 6 figures, 1 table and 4 Soviet references.

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SOV/136-59-4-10/24

AUTHORS: Arkad'yev, A.G., Baldovskiy, L.A. and Forsblom, G.V.

TITLE: Methods of Measuring the Parameters of an Aluminium Electrolyser (Metody izmereniya parametrov alyuminiyevogo elektrolizera)

PERIODICAL: Tsvetnyye metally, 1959, Nr 4, pp 49-56 (USSR)

ABSTRACT: In 1950-1955 the Tsentral'naya laboratoriya avtomatiki (Central automation laboratory) of the Ministerstvo chernoy metallurgii SSSR (Ministry of Ferrous Metallurgy of the USSR) and the Vsesoyuznyy alyuminiyev-magniyevyi institut (All-Union Aluminium-Magnesium Institute) carried out work on the automatic measurement and control of aluminium-electrolyser parameters. The work was carried out at the Volkhovskiy (Volkhov) and mainly at the Ural'skiy (Ural) aluminium works. In addition to the authors the following participated: N.L.Zenov, T.A.Ivanets, V.A.Kukhtin and A.T.Mamontov (Ural Works) V.I.Gruzin (TsLA), R.A.Sandler, Ye.I.Glaz and others (VAMI). One of the main objects of the work was on the inter-polar distance parameters, for dealing with which existing methods are inadequate. The first stage was the development of a method for measuring the resistance of

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SOV/136-59-4-10/24

Methods of Measuring the Parameters of an Aluminium Electrolyser

the electrolyte in the inter-polar space and for the determination of the potential of the sole of the anode and the surface of the metal. For the latter suitably arranged uninsulated probes were used (Fig 1); the potentials measured thereby were not exactly equal to the values on the anode sole and metal surface but were sufficiently so for practical purposes (table 1 shows the values and errors). For measuring the electrolytic resistance in the inter-polar space a resistance meter developed at the TsLA was used (Fig 2). This is based on an automatic electronic potentiometer (types BP-102 and EPP-09 were used) and gave results correct to $\pm 1.5\%$ for most of the operating period (table 2) and for six months has been successfully used at the UAZ to regulate ten electrolyzers, reducing power consumption by 1.5%. The authors outline the theory of the device. They go on to show how it can be used, together with a device for measuring anode movement, for measuring the electrical conductivity of the electrolyte

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SOV/136-59-4-10/24

Methods of Measuring the Parameters of an Aluminium Electrolyser

and the interpolar distance. The arrangement shown in Fig 3, has the disadvantage that, if used for control purposes, it requires a complicated apparatus. The authors therefore developed a variant (Fig 4) containing additionally a relay and contact group and a transmitting potentiometer mechanically linked with the pointer of the anode-movement measuring device. Tests and calculations have shown that this arrangement gives the conductivity and the inter-polar distance with errors of under ± 4 and $\pm 9\%$ respectively. In a six month test on ten electrolyzers at the UAZ, with automatic control through inter-polar distance, a 1% reduction in power consumption was obtained. The mean values of electrolyte conductivity and the back emf of production electrolyzers ($1.48 \text{ ohm}^{-1} \text{ cm}^{-1}$ and 1.45 V respectively) differ from previously accepted values. There are 4 figures, 2 tables and 2 Soviet references.

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S/136/60/000/010/004/010
E071/E333

AUTHORS: Forsblom, G.V. and Sandler, R.A.

TITLE: The Influence of Some Technological Parameters on
the Indices of the Process of Magnesium¹Thermal
Reduction of Titanium Tetrachloride ✓

PERIODICAL: Tsvetnyye metally, 1960, No. 10, pp. 62 - 67

TEXT: The results of a laboratory investigation on the
influence of temperature, rate of feed of titanium tetra-
chloride (expressed in g/cm² of the cross-sectional area
of the reaction vessel, per hour) and partial pressure of
argon in the reaction vessel, are reported. The experiments
were carried out in a reactor (shown in Fig. 1), in two types
of a reaction vessel: a screened (broken lines in Fig. 1) and
an open vessel. As a reducing agent, a standard magnesium
in ingots was used. The ingot was preliminarily annealed in
a furnace and then cleaned with wire brushes until the metal
was shining. The total charge of magnesium amounted to
400 g. Temperatures and pressure in the reaction vessel were
recorded. In experiments on the determination of the maximum

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S/136/60/000/010/004/010
E071/E333

The Influence of Some Technological Parameters on the Indices of the Process of Magnesium Thermal Reduction of Titanium Tetrachloride

possible coefficient of utilisation of magnesium, the reduction process was stopped as soon as there was a sharp and stable increase of the pressure inside the reactor. In other experiments the process was stopped when a given and constant quantity of Mg was used up. Depending on the rate of feeding $TiCl_4$ a given constant temperature in the reactor was maintained

either by the furnace or by cooling with air in the furnace. For feed rates above $50-60 \text{ g/cm}^2$ the reactor was placed outside the furnace and water-cooled. The influence of the feeding rate of titanium tetrachloride on the yield of the sponge and the degree of utilisation of magnesium (at 850°C) is shown in Fig. 2 (top for screened and bottom for unscreened reaction vessel). With the screened vessel the feed rate of titanium tetrachloride has no influence on the yield of sponge which amounted to 97-99%; with the unscreened vessel such a yield can be obtained only at moderate velocities. The influence of the feeding rate on the degree of utilisation of magnesium in the screened reaction vessel at temperatures of 850 , 920 and 1000°C is shown in Fig. 3. The dependence of the yield of sponge on the

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E071/E333

The Influence of Some Technological Parameters on the Indices of the Process of Magnesium Thermal Reduction of Titanium Tetrachloride

coefficient of utilisation of magnesium (Fig. 4) indicates that a decrease in the yield begins at 68-70% utilisation of magnesium. Thus, in order to obtain a high yield of sponge the process should be stopped before a stable increase in pressure occurs. The influence of the rate of feed on the yield of fine fractions of sponge at the above temperatures is shown in Fig. 5. With increasing temperature the influence of the feeding rate decreases. Sponge produced at high feeding rates of $TiCl_4$ is more porous,

more branched and can be removed more easily from the reaction/ ^{vessel.} The influence of the partial pressure of inert gas (argon) on the reduction process is shown in Fig. 6. Increasing pressure of the inert gas decreases the yield of sponge and the coefficient of utilisation of magnesium and increases the proportion of fine fractions in the sponge produced. The negative influence of increasing pressure of argon is explained by the formation of a larger proportion of lower titanium chlorides.

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The Influence of Some Technological Parameters on the Indices
of the Process of Magnesium Thermal Reduction of Titanium
Tetrachloride

At an argon pressure below 0.2 - 0.3 atm. abs., the formation of lower titanium chlorides was not observed. An increase in the partial pressure of argon is accompanied with an increase in the iron content in the sponge, e.g. at a pressure of 0.16 - 0.18 atm. abs., the iron content was 0.98% and at 2.85 - 3.0 atm. abs., the iron content increased to 4.6% (more data are given in the text). The influence of the feeding rate of $TiCl_4$ on the content

of iron and chlorine in the sponge produced is shown in Fig. 7. With a decreasing feeding rate, the content of the above elements increases. It is concluded that:

- 1) an increase in the partial pressure of inert gas during the reduction process decreases the utilisation of titanium tetrachloride, promotes the formation of lower chlorides, increases the content of iron in sponge;
- 2) an increase in the feeding rate of titanium tetrachloride into the reactor decreases the content of iron and chlorine in

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The Influence of Some Technological Parameters on the Indices
of the Process of Magnesium Thermal Reduction of Titanium
Tetrachloride

the sponge produced and does not produce any practical
deterioration in other indices of the process.

3) the necessity of insulating the reaction space from cold
zones of the reactor (if such are present) was confirmed. In the case
of a sufficiently tight insulation of the reaction space the
yield of sponge is mainly determined by the coefficient of
utilisation of the magnesium. There are 7 figures.

ASSOCIATION: VAMI

Card 5/5

FORSBLOM, G. V.; ARAKELYAN, O. I., KUZNETSOVA, Ye. I.; GOLDELENOK, Ye. G.

Studying the structure of titanium sponge. *TSvet. met.* 33 no.8:50-51
Ag '60. (MIRA 13:8)

1. Vsesoyuznyy alyuminiyev-magniyevyy institut.
(Titanium-Metallography)

FORSBLOM, G.V.; SANDLER, R.A.

Effect of certain technological parameters on the indices of the
magesiothermic process for the reduction of titanium tetrachloride.
TSvet. met. 33 no.10:62-67 o '60. (MIRA 13:10)

1. Vsesoyuznyy alyuminiyev-magniyevyy institut.
(Titanium chloride) (Titanium--Metallurgy)

MASHOVETS, V.P.; FORSBLOM, G.V. Prinimal uchastiye POPOV, R.B.;
GULYANITSKIY, B.S., inzh., retsenzent; FIRSANOV, L.A.,
red.; ATTOPOVICH, M.K., tekhn. red.

[Electrolytic production of aluminum] Elektroliticheskoe
proizvodstvo aliuminiia; prakticheskoe rukovodstvo dlia
rabochikh, brigadirov i masterov tsekhov elektroliza aliu-
minevykh zavodov. Moskva, Metallurgizdat, 1951. 220 p.
(MIRA 16:7)

1. Vsesoyuznyy alyuminioyevo-magniyevyy institut (for
Mashovets, Forsblom).

(Aluminum--Electrometallurgy)

"Scientific base of the process of fulling."
Industria Textile, Bucuresti, Vol 5, No 5, May 1954, p. 197

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

YUGOSLAVIA / Virology. Human and Animal Viruses.

E-3

Abs Jour: Ref Zhur-Biol., No 10, 1958, 43066.

Author : Zeljko, M., Forsek, Z.

Inst : Not given.

Title : Experimental and Practical Checking of a Modified Hog Cholera Virus Obtained from Hogs.

Orig Pub: Veterin. arh., 1956, 26, No 9-10, 237-253.

Abstract: A modified virus (M-virus) was obtained from laparized (?) hog cholera virus additionally passed once through piglets of 25-30 kg. As vaccine we used defibrinated blood of a hog variety (weight 25-30 kg) sensitive to virus, taken on the 6-7 day after infection at a temperature not lower than 39.5°, or lyophilized material composed of a 10% spleen suspension in undiluted defibrinated blood. In the defibrinated blood at a temperature from -2° to -4° the virus was preserved for a period of 4-5

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YUGOSLAVIA / Virology. Human and Animal Viruses.

E-3

Abs Jour: Ref Zhur-Biol., No 10, 1958, 43066.

Abstract: months, at room temperature for 18 days; in lyophilized material at -4° for a period of 8 months. The virus was administered together with 5-10 ml of serum depending on the weight and condition of the animal. When 10 ml of hyperimmune serum was administered, no post-vaccination reactions were observed. Data are given of virus titration on hogs, in solutions of 1:50, 1:100, and 1:150 given either with or without the serum. The pathogenic potential of M-virus was low. In the district of Voyvodin, when 1,062,099 hogs were vaccinated, during a 3-week period after vaccination reactions were observed in 0.16%; 0.05% of the animals died. Immunity failure was noted in very young animals or when improper vaccine was used.

Card 2/2

YUGOSLAVIA/Diseases of Farm Animals - Diseases Caused by
Viruses and Rickettsiae.

R-3

Abs Jour : Ref Zbir - Biol., No 14, 1958, 64669

Author : Forsek, Z., Zeljko, M., Kurtanjek, I.

Inst :

Title : Immunization of Chickens Against the Newcastle Disease by
Means of the Addition of the Virus of the Newcastle Disease
to Drinking Water with a Stabilizer.

Orig Pub : Veterinaria (Jugosl.), 1957, 6, No 1, 4-12.

Abstract : The best vaccine for the immunization of chickens according to this method was found to be the glycerinated virus of the Muktesvar strain, and the best stabilizer, powdered milk. The amount of virus necessary for immunization was about 15 thous. units DL₅₀ per 1 ml. The titer of the retardation of agglutination in the vaccinated chickens averaged about 1:250 and the number of chickens that had not acquired immunity did not exceed 4%. Bacterial

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F 2A 1/4
YUGOSLAVIA/Microbiology - Microbes Pathogenic for Man and
Animals. Bacteria. Mycobacteria.

F

Abs Jour : Ref Zhur Biol., No 22, 1958, 99503

Author : Forsek, Z., Tunkl, D., Romic, Z.

Inst :

Title : Testing of Dovine Tuberculin on Artificially Sensitized
Cattle. I. Sensitization of Cattle with Killed Tubercl
Bacteria

Orig Pub : Veterinaria (Jugosl.), 1957, 6, No 4, 55

Abstract : No abstract.

Card 1/1

YUGOSLAVIA

Z. FORSEK, Institute for Scientific Research and Diagnosis of Veterinary
Faculty (Naucno-istrazivacki i dijagnosticki institut Veterinarskog
fakulteta) Sarajevo.

"Plans, Experiences and Methods of Control of Hog Cholera in Some Other
European Countries and in Yugoslavia."

Belgrade, Veterinarski Glasnik, Vol 17, No 4, 1963; pp 345-349.

Abstract : A general review of the epidemiologic conditions and measures
as carried out to control hog cholera in France, England, Germany and
Yugoslavia. Four Western and 5 Yugoslav references.

FORSEK, Z.

SURNAME (in caps); Given Names

Country: Yugoslavia

Academic Degrees: [not given]

Affiliation: Center for Infectious Diseases and Microbiology of
the Faculty of Veterinary Medicine (Zavod za zaraze i
microbiologiju Veterinarskog fakulteta) Sarajevo

Source: Belgrade, Veterinarski glasnik, No 5, 1961, pp 365-367.

Data: "Epizootiology of Psittacosis."

Authors:

FORSEK, Z.

MATUKA, S. ✓

YUGOSLAVIA

NEVJESTIĆ, A., Dr., Assistant, RUKAVINA, Lj, Dr., Assistant, FORSEK, Z., Dr., Professor; Scientific Research and Diagnostic Institute, Faculty of Veterinary Sciences, Sarajevo

"Qualitative and Quantitative Colorimeter Amylase Test of Pancreatic Tissue in Diagnostics of Hog Cholera"

Belgrade, Veterinarski Glasnik, Vol 20, No 9, 1966, pp 647-652

Abstract: Using qualitative (Taylor test) and quantitative amylase tests the authors carried out examination of pancreas of pigs which died after natural infection by hog cholera virus. In the group of pigs without secondary bacterial infection, the qualitative and quantitative tests were 76.38% and 62.50% positive, respectively. With pigs exhibiting also secondary bacterial infection, the results were 60.00% and 63.33%, respectively. Finally, in pigs which were infected by *E. rhysopathiae* or *Salmonella* only, the positive tests results were 7.69% and 15.38%. This, together with the fact that the numbers for healthy pigs are 2.50% and 2.00%, seems to indicate that Taylor's test, though not completely specific, can be used for the diagnosis of hog cholera. There are 7 Yugoslav, 7 Soviet, and 2 Western references.
(Manuscript received, 13 Jun 66.)

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FURSH, B.N.		137 AND 140 999101	PROCESSES AND PROPERTIES INDEX	140 AND 141 999102
A-1				
Method of expression of results of hydro- chemical analysis. B. N. FURSH. Chem. Anal. S. U. R. S. No. 7, 000, 000, 000, 000, 000. B. T.				
AIB-1A METALLURICAL LITERATURE CLASSIFICATION				
13000 17700 17900		137000 14100 14200		
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146000 14700 14800		149000 15000 15100		
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998000 99900 100000		1001000 100200 100300		

FORSH. R.N.

PROCESSES AND PROPERTIES INDEX

Geochemical composition of ocean and continental water (from Baffin). B. N. Fersman. Compt. rend. Acad. Sci. U.R.S.S., 1935, 4, 145.

(46).—The content (μ_0) of C, N, O, Na, Mg, Al, Si, P, S, Cl, K, and Cs had been determined at the reservoir at Hafnia, and has been compared with the content, in the ocean (μ_0). μ_0/μ_0 plotted against group no. in the previous table gives a graph with a max. of group IV, groups I and VII giving the lowest val. R. S. B.

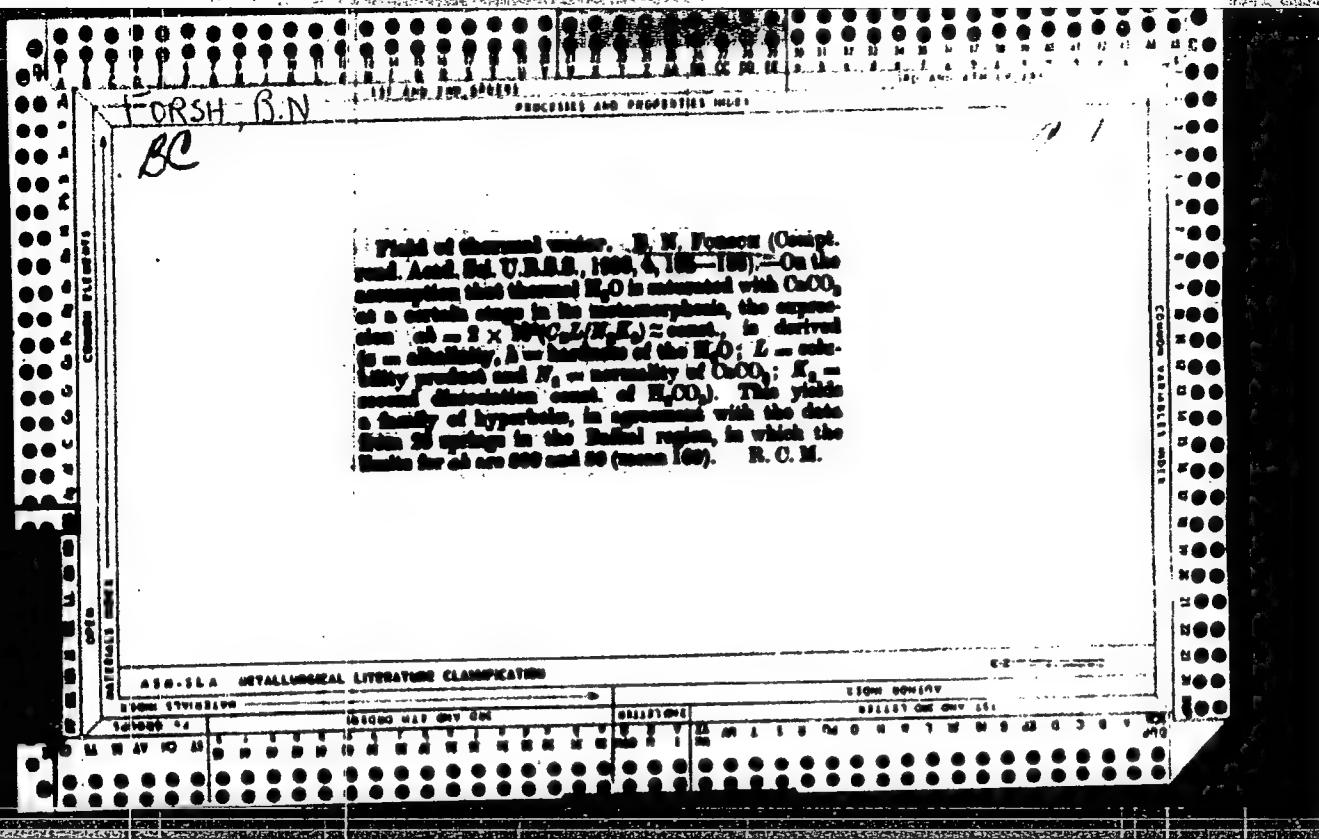
R. B. D.

AMERICAN METALLURGICAL LITERATURE CLASSIFICATION

G. E. D. 1970

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413520007-9"



Mr. Abu. FORSH, B.N.

AI-11, COMM-FBI

Fundamental parameter of salt discharge for a clear river bed. B. N. Fortsch
(Cope. renl. Acad. Sci. U. R. S. S., 1961, 32, 279-281). W. R. A.

Baykal Limnology Station, Acad Sci USSR.

Basic parameters of salt flow in open channels R. N.

Vorob. Doklady Akad. Nauk S.S.R. **66**, 425 R (1959)

Empirical dependence of salt content on the rate of water flow in river channels may be given by $c = AQ^n$, where c is salt content, Q is the water expenditure (or flow), and A and n are parameters. At value of Q set at unity and considering the solubilities of CaCO_3 , MgCO_3 , CaSO_4 , and all Na salts and chlorides, one may expect the contents of the river waters to be in correspondence with: $\text{Na} < \text{Mg} < \text{Ca} < \text{Cl} < \text{SO}_4 < \text{HCO}_3^-$. Actually reverse results are

encountered because of the variations in the availability of the elements (or ions) in the supplying terrain. Calculated values of n for several Russian rivers are given. The various structural and flow factors which affect the parameters are discussed. G. M. Kosolapoff

G. M. Konlapoff

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000413520007-9"

FORSH, B.N.

Salinity of stream water; results of a theoretical analysis. Trudy
Baik.limmol.sta. 14:7-102 '54. (MLRA 8:5)
(Baikal region--Water--Analysis) (Salinity)

FORSH, L.F.

Evaporation from the Lake Baikal Ice Surface in the Winters of 1942 to 1945.

Dok. Akad. Nauk, 66 (1949), 2, 195-198.

Lab. Lake Studies, Dept. 6-001-6001 Sci. Acad Sci. USSR

SO: Translation Sup.-252467, 30 Dec 1954.

PORSH, L.E.

Reflection of solar radiation from lake surfaces. Trudy Lab.
overed. 3:3-22 '54. (MLRA 8:2)
(Solar radiation)(Lakes)

FORSH, L.P.

Characteristics of the surface temperatures of Lake Baikal. Trudy
Baik. limnol. sta. 15:95-158 '57. (MLRA 10:8)
(Baikal, Lake--Temperature)

FORSH, L.F.

Vertical distribution of meteorological elements over the surface
of waters. Trudy Lab. exeroved. 8:256-277 '59. (MIRA 13:2).
(Hydrometeorology)

FORSH, L.F.

Evaporation from the water surface of small reservoirs in Kursk Province and some dynamic features of their water masses.
Trudy Lab. observed. 13:22-55 '61. (MIA 14:10)
(Borshchen Reservoir—Hydrometeorology)
(Kerezovyy Reservoir—Hydrometeorology)

FORSH, L.F.

Role of silt thickness in the formation of the thermal regime of
Lake Velikoye. Izv. Vses. geog. ob-va 97 no.4:358-364 Jl-Ag '65.
(MIRA 18:8)

FORSH, Nikolay Nikolayevich; POZNER, V.M., redaktor; PERMINOV, S.V., redaktor; GENNAD'YEVA, I.M., tekhnicheskiy redaktor.

[Permian deposits; Ufa series and the Kazanian stage] Permskie otlozheniya; ufinskaya svita i kazanskii iarus. Leningrad, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1955. 156 p. (Leningrad. Nauchno-issledovatel'skii geologo-ravvedochnyi institut. Trudy no. 92). (MLRA 9:5) (Geology, Stratigraphic)

USSR/ Geology - Paleontology

Card 1/1 Pub. 22 - 34/49

Authors : Kara-Murza, E. N.; Kolyadnyy, S. N.; and Forsh, N. N.

Title : The flora from the red-colored stratum of the Chaleken peninsula

Periodical : Dok. AN SSSR 102/1, 137-139, May 1, 1955

Abstract : Geological data are presented on the flora from the red colored strata of the Chaleken peninsula in western Turkmen-SSR.

Institution : All-Union Petroleum Sc. Res. Geol. Explor. Inst.

Presented by : Academician D. V. Nalivkin, January 3, 1955

FORSH, N.N.

Method for correlating red beds in western Turkmenia. Avtoref. nauch.
trud. VNIGRI no.17:252-257 '56. (MIRA 11:6)
(Turkmenistan--Rocks, Sedimentary)

FORSH, N.N.; KOLYADNYY, S.N.

Correlation of red-colored deposits of the Neogene in Turkmenistan.
Geol. nefti 1 no.2:30-32 P '57. (MLRA 10:8)
(Turkmenistan--Geology, Stratigraphic)

FORUM, N.Y.

3(5);15(5)

PHASE I BOOK EXPLOITATION

SOV/1385

Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy geologorazvedochnyy institut

Geologicheskiy sbornik, 3 (Collection of Articles in Geology, Vol. 3) Leningrad,
Gostoptekhizdat, 1958. 471 p. (Series: Its: Trudy, vyp. 126) 2,400 copies
printed.

Ed.: Kudryavtsev, Nikolay Aleksandrovich; Executive Ed.: Fedotova, M.I.;
Tech. Ed.: Gennad'yeva, I.M.

PURPOSE: The book is intended for petroleum geologists working in Siberia and
other petroliferous regions of the USSR and all other specialists operating
in the field of oil recovery.

COVERAGE: The present collection of articles covers a large variety of subjects
in the field of petroleum geology. Among them are problems in general geology
and tectonics, such as studies of the boundaries between Cambrian and Precambrian
rocks, methods for differentiating red beds under complex tectonic conditions,
the relationship between the Urals and Pay-Khoy and Taymyr, the tectonics of
the Carpathian Mountains, including the stratigraphy of different regions of the

Card 1/5

Collection of Articles in Geology (Cont.)

SOV/1385

Lower Permian of Timan, the continental deposits of the Chelyabinsk Region, the Tertiary deposits of Kamchatka, the geological structure and oil-bearing possibilities of different regions of Western and Eastern Siberia and Mangyshlak, and certain problems in geochemistry and hydrogeology. New and interesting material is provided by Ye.A. Kareva on the stratigraphy of the Mesozoic of the Zaural'ye, which, based on paleontological data, permits a breakdown of the brown coal continental deposits of the Chelyabinsk Region into a number of series, thus proving the existence of three coal bearing horizons of different ages in the stratigraphic column. Of particular interest are G.Ye-A. Ayzenshtadt's studies supporting a view diverging from the generally accepted gravitational theory on the growth of salt domes, and T.L. Derviz statement on the Rhaetic-Lias age of the lower horizons of the Mesozoic in the southeastern part of the West Siberian Plain. More than half of the articles are concerned with studies made on the oil-bearing possibilities of the various regions of Siberia, and of oil exploration carried on in that area. The articles are accompanied by diagrams, tables and bibliographic references.

Card 2/5

Collection of Articles in Geology (Cont.)

SOV/1385

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Card 4/5

1980-07-14-171

U.S., N.N.; KHRANOV, A.F.

Paleomagnetism and paleoclimate of the Russian Platform during the Carboniferous and Permian periods. Dokl. AN SSSR 137 no. 1:154-157 Mr-Ap '61. (MIA 14:2)

1. Vsesoyuznyy naftyanoy nauchno-issledovatel'skiy geologorazvedochnyy institut. Predstavлено shchadnikom N.N. Strakhovym.
(Russian Platform--Paleoclimatology)
(Russian Platform--Magnetism, Terrestrial)

FORSH, N.N.

Stratigraphic division and correlation of the sections of the Tatarian stage in the eastern part of the Russian Platform based on the complex of lithologic, stratigraphic, paleomagnetic, and paleontologic data. Trudy VNIGRI no.204:175-212 '63. (MIRA 16:6)

(Russian Platform--Geology, Stratigraphic)

NALIVKIN, V.D.; RONOV, A.B.; KHAIN, V.Ye.; VOKOLOV, B.S.; DOMRACHEV, S.M.; TIKHIY, V.N.; POZNER, V.M.; FORSH, N.N.; LYUTKEVICH, Ye.M.; SLAVIN, V.I.; SAZONOV, N.P.; SAZONOVA, I.G.; SHUTSKAYA, Ye.K.; KRASNOV, I.I.; KALENOVA, G.N.; VINOGRADOV, A.P., glav. red.;

[History of the geological development of the Russian Platform and its margins] Iстория геологического развития Русской платформы и ее обрамления. Москва, Nedra, 1964. 251 p. Maps Karty. 981. (MIRA 18:4)

6467

NAME & BOOK EXPLANATION

Pravda, Moscow.

Pravda Sovetskoi Kosmicheskoi Kosmi: materialy, opublikovannye v zhurnale "Pravda" (The Second Soviet Cosmic Ship). Materials published in the Newspaper "Pravda", Moscow, 1960. 198 p.

Keep for this Publication: V. Reut and V. Selivanov; Tech. Ed.: V. Fedotov.

PURPOSE: This book is intended for the general reader.

COVERAGE: The book is a compilation of articles which appeared in the newspaper Pravda, after the launching, orbiting, and re-entry of the capsule of the Soviet 4,600 kg. spaceship on August 19, 1960. The articles give some details of scientific research undertaken in this flight in the fields of biology, violet radiation, cosmic radiation, solar radiation, ultraviolet radiation, and radiation level. A description and three photos of the capsule are given. No personalities are mentioned. There are no references.

Mathematical Sciences. V. Petrenko, Doctor of Physical and Mathematical Sciences.

Care for Future Astronauts. D. Markov, Academician of the Academy of Sciences USSR [Head of the Chemical and Physiological Laboratory of the Institute of Physiologist (Institute of Physiologist), Moscow]

Pioneer of Great Conquests. A. Al'tshul', Corresponding Member of the Academy of Sciences of Armenia USSR, [Director of the Physical Institute of Armenia USSR, (Physical Institute of the Academy of Sciences Armenia USSR)] Physical Institute of Television "Ere" in Outer Space. P. Fedorov

Two Flights. Leopold Sobolev

Beginning of a New Era. Oleg Parin

Meeting With the First "Astronauts". V. Selivanov, V. Shirokov

Event Which Surprised the World. D. Martynov, Professor, Head of Astronomical (State Astronomical Astronautics) Institute [Academy of Sciences]

Creative Genius of the Builders of Cosmonautics. Editorial in Pravda

Solution of a Very Important Problem. V. Ambartsumian, Academician

Monumental Success of Soviet Science and Engineering. Press Conference in the Academy of Sciences USSR

Biological Program of the Spaceship. I. Sisilov, Academician 130

On the Eve of Manned Space Flight. V. Parin, Active Member of the Academy of Medical Sciences USSR

Into the Depths of the Microcosmos. J. Verner, Corresponding Member of the Academy of Sciences USSR; N. Grigor'ev, Professor 143

SOV/5174

FORSH, O.D.

Species of fern new for the flora of the U.S.S.R. Bot. zhur.
49 no. 5:744 My '64. (MIRA 17:8)

1. Sudzukhinskiy filial Sikhote-Alinskogo zapovednika,
Primorskiy kray.

VEBER, V.V., professor; GORSKAYA, A.I.; YEGOROV, Ye.N.; MANUCHAROVA, Ye.A.;
MESSIMINA, M.A.; RADCHENKO, O.A.; RIMMOVA, T.S.; ROMM, I.I.;
SAVICH, V.O.; SKADOVSKIY, S.N.; UL'M, V.A.; FOKINA, N.I.; FORSH, T.B.;
SHABAROVA, N.T.; SHCHAPOVA, T.F.; EBERZIN, A.G.; YURKEVICH, I.A.

Results of the comprehensive study of contemporary analogues of oil-bearing facies. Trudy VNIGNI no.2:111-121 '51. (MLRA 10:4)
(Petroleum geology)

FORSH, T.B.

Graphic representation of the chemical composition of surface waters.
Gidrokhim.mat. 24:93 '55. (MIRA 9:4)

1. Laboratoriya ozerovedeniya Akademii nauk SSSR, Leningrad.
(Water, Underground) (Water--Analysis)

FORSH, T.B.

Evaporation and transpiration in the Amu Darya Delta. Trudy
Lub, accepted. 4:35-170 '67. (MLRA 10:9)

(Amu Darya Delta--Evaporation.) (Amu Darya Delta--Plants--Transpiration)

FORSH, T.B.

Graphic method of representing the ionic composition of natural
waters. Trudy Lab. covered. 5:116-137 '57. (MLRA 10:9)
(Water--Composition)